



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/642,312

08/21/2000

William H. Thompson

8020

7590

04/06/2005

Thomas B Ryan
Eugene Stephens & Associates
56 Windsor Street
Rochester, NY 14605

EXAMINER

TSEGAYE, SABA

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/642,312

Applicant(s)

THOMPSON, WILLIAM H.

Examiner

Saba Tsegaye

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to amendment filed on 01/11/05. Claims 1-29 are pending. Currently no claims are in condition for allowance.

Specification

2. The disclosure is objected to because of the following informalities: on page 8, a remote device 200 and a transceiver 210 are disclosed in the specification, however none of the drawings (1-13) have the remote device or the transceiver 210.

Appropriate correction is required.

Claim Objections

3. Claims 1 and 13 are objected to because of the following informalities:

Claim 1, line 20, the phrase "at least one of the main input node" is confusing because there is no mention of a plurality of main input nodes.

Claim 13 depends on claim 11, which is a system claim, however claim 13 is an apparatus claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. Claims 1-3, 5-9, 12, 15 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zendle et al. (US 6,628,627 B1) in view of Buckley (US 6,366,840 B1).

Regarding claims 1, 12, 21, 23 and 24, Zendle discloses an in-house signal distribution system (see figures 3-5) including: a main input node (412) and taking a plurality of external

Art Unit: 2662

signals (416) for use by different types of devices (430, 432, 434) converting all of the plurality of external signal into addressed data packets, and conveying all of the addressed data packets in a packet stream to each of a plurality of access node (306-1-306-4) each access node having a unique node address (column 6, lines 46-59; column 7, lines 21-37; column 8, line 61-column 9, line 17);

each access node (fig. 4, elements 414) being an access port including a main module (figures 4 and 5, elements 420, 520)

a main module connector connected to the packet stream (figures 4 and 5, elements 418, 518);

distributing connectors (distribution controller 507 is operatively coupled to a plurality of service interface units (column 9, line 63-column 10, line 5)) connected to the main module (the packet of data is transmitted from 420) and arranged for connecting different types of devices, which devices can be non-video devices (430, 432, 434, devices includes telephone equipment and other peripheral devices such as personal computers, column 8, lines 53-61), and can receive respective ones of the signals distributed by the in-house signal distribution network (column 8, line 53-column 9, line 17);

a packet handler that picks packets addressed to the access node from the packet stream (column 7, lines 36-56); and

the packet handler converting the picked packets back to their respective ones of the signals and sending the respective ones of the signals to a respective distributing connector of the access node (column 9, lines 49-59); and

a packet stream distributor carries the packet stream from the main input node (412) output port to each access node (414) main module connector (418, 518), an access node (414) further including a transceiver (505, 518) in wireless communication with at least one of the main input node (412). Zendle, further discloses that **the radio system 420** can be a personal computer of a special purpose computer embodied within a standalone enclosure.

Zendle, however, fails to expressly disclose the radio system 420 as being mounted in a wall of the structure.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Zendle's apparatus to incorporate the standalone enclosure where the standalone enclosure is mounted to a wall, the motivation being that the computer embodied within the standalone enclosure will be more accessible for connection to the end-user devices and to be able to mask wiring behind walls.

Zendle also fails to disclose an access node further including **a transceiver in wireless** communication with a device of the different types of devices (430, 432, 434).

Buckley teaches the use of wireless communication interfaces connected to each other through a wireless medium. Buckley discloses in figure 1 a system for enabling wireless communication among a stand-alone computer, built-in vehicular display, and a trip computer. Buckley further teaches the use of Bluetooth as a method of wireless communication as stated on column 2, lines 13-16.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Zendle's apparatus to incorporate a radio system that is connected to the plurality of service interface units and the end-user devices through a scheme of wireless

Art Unit: 2662

communication, such as Bluetooth, the motivation being a more versatile system where physical wiring is not required among the nodes and where the user can move the device around the home without the hassle of wiring. Installation of the system is also made easier.

Regarding claim 2, Zendle discloses the system wherein the transceiver is a radio frequency transceiver (column 10, lines 54-61).

Regarding claims 3, and 6, with the features in parent claim 1 addressed above, Zendle discloses all the claim limitations as stated above. Further, Zendle discloses that the radio system 420 distributes signals to the appropriate customer premise devices. The distribution controller 507 is operatively coupled to a plurality of service interfaces 508, 509, 510 and other service interfaces 512 such as home security reporting, a computer-based LAN for further signal distribution, and the like. However, Zendle does not expressly disclose that the transceiver uses the Bluetooth standard.

Buckley teaches the use of Bluetooth as a method of wireless communication as stated on column 2, lines 13-16.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zendle's apparatus to incorporate Bluetooth standard, the motivation being a more versatile system where physical wiring is not required among the nodes and where the user can move the device around the home without the hassle of wiring. Installation of the system is also made easier.

Regarding claim 5, with the features in parent claim 2 addressed above,

Art Unit: 2662

Zendle, as modified, discloses the transceiver in the access node is a distributing connector and sends the picked packets to the device of the different types of devices (column 9, line 60-column 10, line 5).

Regarding claim 7, Zendle discloses the system wherein the access node further includes an antenna connected to the transceiver (518 connected to 505).

Regarding claim 8, Zendle discloses the system wherein the antenna is embedded in a wall plate of the access node (column 8, lines 48-52).

Regarding claim 9, Zendle discloses the system wherein a distributing connector receives an antennal cable, thus allowing selective connection of an antenna to the main module (column 8, lines 40-66).

Regarding claim 15, Zendle discloses the main module includes an expansion connector into which a submodule can be inserted (**the radio system 420 distributes signals to the appropriate customer premise devices. The distribution controller 507 is operatively coupled to a plurality of service interfaces 508, 509, 510 and other service interfaces 512 such as home security reporting, a computer-based LAN for further signal distribution, and the like**); and the submodule includes an antenna connector through which an antenna can communicate with the transceiver (**the multi-service subscriber terminal 414 equipped with a computer-controlled radio system 420 which includes a millimeter microwave radio connected a computer within the remote subscriber terminal 414**).

Regarding claim 22, with the features in parent claim 21 addressed above, Zendle, as modified discloses the packet stream is generated by a main input node that takes the plurality of external signal (416) and converts the plurality external signals into addressed data packets carried by the packet stream to the access node (column 9, line 49-column 10, line 5), the plurality of external signal being signals for distribution, the main input node including the another transceiver, the main module connector including the transceiver, and the packet stream including radio transmissions between the transceiver and the another transceiver (column 10, lines 54-61).

5. Claims 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zendle et al. in view of Taguci et al. (US 6,163,532).

Regarding claim 25, Zendle discloses a packet stream decoding access node being an access port of an in-house digital network (figures 3-5), the digital network receiving a plurality of external signals (416) for use by different types of devices (430, 432, 434), converting all of the plurality of external signals into data packets, and conveying all of the data packets in a packet stream to each of a plurality of access nodes (306-1-306-4 (column 7, lines 39-56)), and the packet stream decoding access node including apparatus that receives addressed data packets from the packet stream (416) carried by a packet stream distributor and converts the addressed data packets into signals usable by devices (column 9, line 18-column 10, line 5), which can include non-video devices (telephone 508, PC 510, other services 512), connected to physical medium connectors of the access node (414), the apparatus of the access node further including:

Art Unit: 2662

a main module connector (418) of the access node (414) mounted on a main module (420) of the access node (414) and arranged to receive the packet stream from the packet stream distributor (412);

a packet handling system (fig. 5, 505-507) connected to the main module connector (418, 518) that extracts from the packet stream data packets addressed to one of the access node (414) and a device (430, 432, 434) connected to the access node (414), the packet handling system including a decoder that decodes the extracted data packets into a signal and sends the signal to a physical medium connector connected to the main module (column 9, line 18-column 10, line 5); and

a wireless connection between a transceiver (418, 518, 505) on the main module and another transceiver (412) external of the access node See Fig. 4).

Zendle fails to disclose the packet handling system sending an acknowledgment signal via the packet stream distributor when an addressed data packet has been successfully extracted from the packet stream.

Taguci teaches on column 2, lines 62-64 about acknowledgement signals (If the packet address corresponding to the mobile data terminal equipment, the personal station transmits an acknowledgement signal").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Zendle's apparatus to be able to send a signal acknowledging successful reception of the packet stream, as suggested by Taguci. The motivation is to obtain a more reliable system that can detect transmission errors or receiving errors.

Art Unit: 2662

Regarding claim 26, Zendle discloses the access node wherein the wireless connection includes the packet stream distributor, the transceiver is the main module connector (418, 518), and another transceiver is a central node of the digital network (412).

Regarding claim 27, Zendle discloses the access node wherein the wireless connection includes extracted packets, the transceiver is a distributing connector, and another transceiver is part of a device accessing the digital network via the wireless connection (column 8, line 35-column 9, line 17).

Regarding claim 28, Zendle discloses the access node, further including an antenna connected to the transceiver and mounted in a wall plate of the access node (column 10, lines 18-41).

Regarding claim 29, Zendle discloses the access node further including an antenna connector on the main module, the antenna connector itself being connected to the transceiver and providing selective communication between the transceiver and the antenna (column 9, lines 19-32).

Art Unit: 2662

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zendle et al. in view of Buckley '840 as applied to claim 1 above, and further in view of Lee et al. (US 6,535,493).

Zendle in view of Buckley '840, as modified, discloses the transceiver is a radio frequency transceiver.

Zendle in view of Buckley fails to disclose the transceiver uses the IEEE 802.11 standard.

Lee teaches on column 5, lines 7-12 about utilizing a network that conforms to the IEEE 802.11 standard.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Zendle's apparatus to incorporate transceivers utilized for the embodiment uses the IEEE 802.11 standard, the motivation being a more versatile system where physical wiring is not required among the nodes and where the user can move the device around the home without the hassle of wiring. Installation of the system is also made easier, as taught by Lee.

7. Claims 10, 11, 13, 14, 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zendle et al. in view of Buckley '840 as applied to claim 1 above, and further in view of Buckley (US 6,032,089).

Regarding claims 10 and 11, Zendle in view of Buckley '840 discloses all the claim limitations as stated above.

Art Unit: 2662

Zendle in view of Buckley '840 fails to disclose a feature where the transceiver is an infrared transceiver. Buckley teaches on column 2, lines 59-60 about using an infrared transceiver with IrDA protocol.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Zendle 's apparatus to incorporate a radio system where the transceivers utilized for the embodiment work with an IrDA scheme, the motivation being a more versatile system where physical wiring is not required among the nodes and where the user can move the device around the home without the hassle of wiring. Installation of the system is also made easier.

Regarding claim 13, with the features in parent claim 11 addressed above, Zendle, as modified, discloses the main module includes an expansion connector into which a submodule can be inserted **(the radio system 420 distributes signals to the appropriate customer premise devices. The distribution controller 507 is operatively coupled to a plurality of service interfaces 508, 509, 510 and other service interfaces 512 such as home security reporting, a computer-based LAN for further signal distribution, and the like. This feature denotes the system has the feature to expand; and the distributing connector is on the submodule, and the distributing connector is the transceiver (column 9, line 60-column 10, line 5))**.

Regarding claim 14, with the features in parent claim 13 addressed above, Zendle, as modified, discloses the access node wherein the transceiver includes an antenna connected to the

Art Unit: 2662

submodule (**the radio system 420 distributes signals to the appropriate customer premise devices. The distribution controller 507 is operatively coupled to a plurality of service interfaces 508, 509, 510 and other service interfaces 512 such as home security reporting, a computer-based LAN for further signal distribution, and the like).**

Regarding claim 16, with the features in parent claim 11 addressed above, Zendle, as modified, discloses the main module connector is the transceiver and the packet stream distributor includes radio transmissions between the transceiver and the another transceiver located in a central node of the in-house network (**the radio system 420 distributes signals to the appropriate customer premise devices. The distribution controller 507 is operatively coupled to a plurality of service interfaces 508, 509, 510 and other service interfaces 512 such as home security reporting, a computer-based LAN for further signal distribution, and the like).**

Regarding claims 17 and 18, with the features in parent claim 11 addressed above, Zendle, as modified, discloses the transceiver is a radio frequency transceiver, and uses the Bluetooth standard ("An available embodiment of a wireless communications medium is the Bluetooth technology", column 2, lines 14-15 of Buckley).

Regarding claim 20, with the features in parent claim 11 addressed above. Zendle, as modified, discloses the transceiver is an IR transceiver (**the multi-service subscriber terminal**

Art Unit: 2662

414 equipped with a computer-controlled radio system 420 which includes a millimeter microwave radio connected a computer within the remote subscriber terminal 414).

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zendle et al. in view of Buckley '840, in further view of Buckley '089 as applied to claim 17 above, and further in view of Lee et al. '493.

Regarding claim 19, Zendle, as modified, discloses the transceiver is a radio frequency transceiver.

Zendle fails to disclose the transceiver uses the IEEE 802.11 standard.

Lee teaches on column 5, lines 7-12 about utilizing a network that conforms to the IEEE 802.11 standard.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Zendle's apparatus to incorporate a setup where the transceivers utilized for the embodiment uses the IEEE 802.11 standard, the motivation being a more versatile system where physical wiring is not required among the nodes and where the user can move the device around the home without the hassle of wiring. Installation of the system is also made easier, as taught by Lee.

Response to Arguments

9. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2662

Conclusion

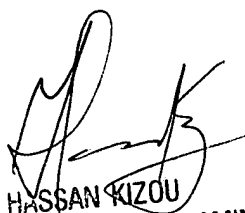
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST

March 29, 2005


HASSAN KIZOU
ASSISTANT PATENT EXAMINER
TECHNOLOGY CENTER 2600